

The Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

As stated in MPEP §§ 2142-2144.04, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach, either explicitly or inherently, or suggest all the features of the independent claims. Independent claims 1 and 6 recite a first resonance circuit and a semiconductor device and that the first resonance circuit can communicate with the semiconductor device. Also, claims 1 and 6 recite a first packing material for packing a product. For the reasons provided below, Nicholson '425 does not teach, either explicitly or inherently, or suggest the above-referenced features of the present invention.

The Official Action asserts that Nicholson '425 teaches "a first resonance circuit (14, Fig. 8A)," "a semiconductor device (tag)(14, Fig. 8A)" and that "the first resonance circuit (14, Fig. 8A) can communicate with the ... semiconductor device (RFID tag)(14, Fig. 8A)(Column 3 lines 40-46)" (pages 4-5, Paper No. 20100604). The Applicant respectfully disagrees and traverses the assertions in the Official Action. Nicholson '425 does not teach, either explicitly or inherently, or suggest that one tag 14 can communicate with another tag 14. For example, the cited portion of Nicholson '425 merely discloses the following: "According to the invention, the passive repeater apparatus 10 is further adapted and positionable with respect to the reader 2 and tag 14 to redirect the magnetic flux field (indicated generally '6') of the reader 2" (column 3, lines 40-46). Therefore, Nicholson '425 does not teach, either explicitly or inherently, or suggest a first resonance circuit and a semiconductor device and that the first resonance circuit can communicate with the semiconductor device.

The Official Action asserts that Nicholson '425 teaches "a first packing material (49, Fig. 8B) for packing a product" and "the product (49, Fig. 8B)" (page 5, Id.). The Applicant respectfully disagrees and traverses the assertions in the Official Action. Nicholson '425 does not teach, either explicitly or inherently, or suggest that one product container 49 should be provided with a tag 14 and that another product container 49 should be provided with another tag 14 and should be placed in the one product container 49. Therefore, Nicholson '425 does not teach, either explicitly or inherently, or suggest a first packing material for packing a product in combination with the other features of the present claims.

Since Nicholson '425 does not teach, either explicitly or inherently, or suggest the above-referenced features of the present invention, anticipation and obviousness rejections cannot be maintained.

Also, it is noted that the rejection of dependent claims 7 and 8 as allegedly anticipated by Nicholson '425 is inappropriate since claims 7 and 8 depend from independent claim 6, which is rejected as obvious based on Nicholson '425.

Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §§ 102 and 103 are in order and respectfully requested.

Paragraph 6 of the Official Action rejects claims 9-12 and 18 as obvious based on the combination of U.S. Publication No. 2004/0217867 to Bridgelall, U.S. Publication No. 2004/0245519 to Van De Walle and U.S. Publication No. 2002/0021208 to Nicholson. The Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

There is no proper or sufficient reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Bridgelall, Van De Walle and Nicholson '08 or to combine reference teachings to achieve the claimed invention. MPEP § 2142 states that the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. It is respectfully submitted that the Official Action has failed to carry this burden. While the Official Action relies on various teachings of the cited prior art to disclose aspects of the claimed invention and asserts that these aspects could be used together, it is submitted that the Official Action does not adequately set forth why one of skill in the art would combine the references to achieve the features of the present invention.

The test for obviousness is not whether the references "could have been" combined or modified as asserted in the Official Action, but rather whether the references should have been. As noted in MPEP § 2143.01, "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art" (emphasis in original). *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1396 (2007). Thus, it is respectfully submitted that the standard set forth in the Official Action is improper to support a finding of *prima facie* obviousness.

The Official Action concedes that "Bridgelall et al. does not teach wherein said semiconductor device comprises a thin film integrated circuit portion comprising an antenna coil and a capacitor, and wherein the semiconductor device is attached to a

product, the product is contained in a packing material, the resonance circuit is attached to the packing material and the reader/writer is disposed outside of the packing material" (page 6, Paper No. 20100604). The Official Action relies on Van De Walle and Nicholson '208 to allegedly cure these deficiencies in Bridgelall (pages 6-7, Id.). Without any specific references to Bridgelall, Van De Walle or Nicholson '208 in support and without establishing the level of ordinary skill in the art at the time of the present invention, the Official Action asserts that "it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the semiconductor device comprises a thin film integrated circuit ... as shown in Van De Walle et al, and the semiconductor device ... as shown in Nicholson et al., in Bridgelall et al. method for the benefit of providing micro contact printing to reduce the manufacturing cost of RFID tag and extending the read/write range of the designated tag" (page 7, Id.). The Applicant respectfully disagrees and traverses the above assertions in the Official Action.

Initially, it appears that problems to be solved in Bridgelall and Nicholson '208 are almost the same. That is, Bridgelall and Nicholson '208 appear to be concerned with a wireless communication between an interrogator or an RFID reader/writer (R/W) and the tag attached to one of multiple objects (i.e. containers), which is stacked and/or arranged in any number of configurations or arrangements. If the object is provided inside of multiple objects, wireless communication becomes difficult (paragraph [0004] of Bridgelall). In order to solve the problem, Bridgelall employs a relay device (paragraph [0005]), while Nicholson '208 employs a loop attached to a container, which may arguably correspond to the claimed resonance circuit.

The Applicant respectfully submits that the Official Action has not demonstrated sufficient reasons why one of ordinary skill in the art the time of the present invention would necessarily combine Bridgelall and Nicholson '208 in order to achieve the present invention. Independently and separately, Bridgelall and Nicholson '208 have already solved their problems. More specifically, even if one were to provide the containers of

Bridgelall in the container of Nicholson '208, which is provided with a loop, there is no reason to apply the loop attached to the container of Nicholson '208 to Bridgelall. Since Bridgelall has solved problems due to interference and/or obstructions due to interrogation signals and/or response signals by employing a relay device, Bridgelall does not require the additional loop of Nicholson '208.

On the other hand, if at least one container of Bridgelall is provided in another container of Bridgelall, and if each were provided with the relay device structure of Nicholson '208, the Official Action has not demonstrated why one of ordinary skill in the art the time of the present invention would have recognized the merit of relay devices for transmitting signals to adjacent relay devices, where the adjacent relay devices are closer to the interrogator or the RFID tag. In any event, Bridgelall's relay device does not require an additional loop or relay device attached to a container that contains the relay devices.

The Applicant respectfully submits that Van De Walle, which is relied upon to allegedly teach a transponder, thin film structures, an antenna and a capacitor (page 7, Id.), does not cure the above-referenced deficiencies in Bridgelall and Nicholson '208.

Therefore, the Applicant respectfully submits that the Official Action has not provided a proper or sufficient reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Bridgelall, Van De Walle and Nicholson '208 or to combine reference teachings to achieve the claimed invention.

In the present application, it is respectfully submitted that the prior art of record, either alone or in combination, does not expressly or impliedly suggest the claimed invention and the Official Action has not presented a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

For the reasons stated above, the Official Action has not formed a proper *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Paragraph 7 of the Official Action rejects claims 13-17 and 19 as obvious based on the combination of Nicholson '425 and Van De Walle. In response, please incorporate by reference the detailed arguments set forth at page 16, lines 13-23, of the *Amendment* filed May 4, 2010. The Official Action does not appear to address these arguments.

Paragraph 8 of the Official Action rejects dependent claims 20 and 21 as obvious based on the combination of Nicholson '208 and U.S. Publication No. 2004/0082296 to Twitchell. Paragraph 9 of the Official Action rejects claim 22 as obvious based on the combination of Bridgelall, Van De Walle, Nicholson '208 and Twitchell.

Initially, it is noted that the rejection of dependent claims 20 and 21, which depend from claims 1 and 6, respectively, as obvious based on the combination of Nicholson '208 and Twitchell is inappropriate since claims 1 and 6 are rejected as anticipated by or obvious in view of Nicholson '425.

In any event, please incorporate the arguments above with respect to the deficiencies in Nicholson '425 or '208; or Bridgelall, Van De Walle and Nicholson '208. Twitchell does not cure the deficiencies in Nicholson '425 or '208; or Bridgelall, Van De Walle and Nicholson '208. The Official Action relies on Twitchell to allegedly teach the features of the above-referenced dependent claims. Specifically, the Official Action relies on Twitchell to allegedly teach, e.g., "the product management system, wherein the second packing material is a transport vehicle" (page 13, Paper No. 20100604). However, Nicholson '425 or '208; or Bridgelall, Van De Walle and Nicholson '208 and Twitchell, either alone or in combination, do not teach or suggest that Nicholson '425 or '208; or Bridgelall, Van De Walle and Nicholson '208 should be modified to include a first resonance circuit and a semiconductor device and that the first resonance circuit can communicate with the semiconductor device; or a first packing material for packing

a product; or why one of ordinary skill in the art the time of the present invention would necessarily combine Bridgelall and Nicholson '208 in order to achieve the present invention. Since Nicholson '425 or '208; or Bridgelall, Van De Walle and Nicholson '208 and Twitchell do not teach or suggest all the claim limitations and since there is insufficient reason to combine Nicholson '425 or '208; or Bridgelall, Van De Walle and Nicholson '208 and Twitchell, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.

Respectfully submitted,



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